being strictly followed in the R&D Wing, IOC, Faridabad; and

(b) if the answer be in the negative what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATUREAL GAS (SHRI T.R. BAALU): (a) Yes, Sir.

(b) Does not arise.

Seminar on Planning and Management of Bridges and Flyovers

*307. SHRI O.P. KOHLI: Will the PRIME MINISTER be pleased to state:

(a) whether a National seminar on planning and management of bridges and flyovers was held recently;

(b) if so, the details of points discussed therein and the decisions arrived at;

(c) what steps Government propose to take to bring transparency in the bidding and speedy clearance and construction of bridges and flyovers; and

(d) the number of bridges and flyovers pending clearance/execution in Delhi?

THE MINISTER OF STATE IN THE MINISTRY OF URBAN AFFAIRS AND EMPLOYMENT (DR. U. VENKATESWARLU): (a) A National Seminar on Planning & Management of Bridges and Flyovers was organised by the Delhi State Centre of the Indian Institute of Bridge Engineers in association with the Central Public Works Department, Border Roads Organisation and the Indian Railways on 17.5.96 and 18.5.96.

(b) The recommendations of the Seminar are given in Statement *(see* below).

(c) The system of tendering and award of works being followed by the CPWD and the PWD of the National Capital Territory of Delhi is transparent and is according to the codal provisions and manuals. The works are awarded after detailed examination of justification of rates.

(d) The number of flyovers and bridges projects in Delhi pending clearance/execution/completion is given in Statement-II.

Statement-II

National Seminar on Planning & Management of Bridges and Flyovers held on 17th & 18th May, 1996 at New Delhi

Recommendations of the Seminar

The above Seminar after detailed deliberations brought forwarded the following points as the Recommendations of the Seminar for consideration by the concerned authorities.

I. ISSUES RELATED TO PLANNING AND PRETENDER STAGE FOR BRIDGES AND FLYOVERS.

(a) The owner should invest more time and money in getting all the investigations e.g. traffic studies, geotechnical investigation and hydraulic studies done in detail so that uncertainties during construction are reduced.

(b) Assistance of reputed consultants and specialised agencies, should be taken for detailed investigation and detailed engineering in case the onwer does not have adequate infrastructure. The Consultant should adopt the latest and modem technology.

(c) The need for looking at the life cycle cost of a project in place of estimated cost of the project while assessing the financial or economic viability was emphasised upon. For projects through alternative financing e.g. BOT, BOLT this is more relevant.

(d) The State should take initiative in making available land well in advance, before the start of the project, so that the same can progress uninterruptedly. The land required for future development of widening of a road corridor should be clearly identified in the master plan and the area reserved for the same.

(e) An unified, high powered, multi disciplinary authority for single window clearance, particularly for projects in urban area, is required to be set up to minimise the time in approving such projects so that the benefit of such projects are available to the society early.

(f) From the concept stage the planning and design should be handled by a multi disciplinary team in a comprehensive mananer.

(g) The selection of design should be such that it can be executed in a fast manner with the help of required plant and machinery. Use of precast elements to be adopted to the extent possible.

(h) the existing provisions in the national code in respect of durability, loading etc. needs to be rationalised. Similarly provisions for precast technology to be included adequately in the national codes.

(i) A proper Quality plan should be developed for proper project management.

II. ROLE OF OWNER, CONSULTANT AND CONTRACTOR FOR FREE OF PROPER CONTRACT DOCUMENT AND PROJECT MANAGEMENT.

(A) ROLE OF OWNER:

For preparation of a proper bid document and awarding the contract which will be more transparent, more balanced and will help in faster execution, the owner has to play a major role in the following manner.

(a) The owner should carryout a detailed activity analysis of the project for discussion with the pre-qualified contractors, workout optimum requirement of equipments financing and workout the cost of the project after catering for all such activities. The project costing should be pragmatic and include indirect and incidental cost.

(b) Variations during execution, in spite of the best efforts on the part of the owner or his engineer & consultants, are anticipated, may be to a minor extent. The contract document should be so formulated that it provides for flexibility in price variation for changes in the quantum of work during the execution.

(c) The contract document should have provision for dispute resolution concurrently with the progress of the work. Method for resolving the dispute should be transparent and the engineer or supervision consultant should be given adequate powers/autonomy to take decisions for solving the disputes.

(d) The department or the owner should supplement, wherever necessary, its own engineering cadre by appointing pre-qualified experienced resourceful engineering and project management consultant so that the decision making with the help of the appropriate team becomes fast.

(e).The owner should allow adequate time for studying and submittal of tender. Similarly the time of completion should be realistic.

(f) The contract format for agreement between the owner and the concessionaire for alternative financing projects e.g. BOT/BOLT will be different from normal construction contract documents.

(B) THE ROLE OF THE CONSULTANT:

The role of consultant is identified as complementary function of the owner's engineer and they should be pre-qualified on the project specific basis. The consultant should play a role or responsible organisation and should give their expert reasoned advise in the interest of the project. The consultant also should evolve the method of construction and workout the detailed engineering consid-

cring the life cycle cost prepare Quality plan and provide a durable structure with a fast method of construction.

(C) THE ROLE OF THE CONTRACTOR:

(a) The role of the contractor is envisaged, as a facilitator to the owner in finalising the bid document including arriving at the realistic estimated cost of the project. They should study the contract documents well in advance, give their positive responses during the pre-bid conferences for arriving at practical and transparent contract documents.

(b) The contractor should price his offer considering the use of required equipments and should mobilise them well in time and keep the equipments in running and good performing condition while the work is in progress. It is the Contractor who is overall responsible for Quality of Work.

III OTHER ISSUES:

(a) Today in the changing scenario of liberalised economy the contractor is being considered as a part of the team comprising of owner consultant and contractor. It warrants a change in mindset of all the three.

(b) Bridge engineering needs specialised knowledge and expertise with continuous updating of the same through human resource development.

(c) Importance should be given to develop good project managers for better performance in addition to working out systems for better project management. The project team should be permitted to continue from the inception to the end, to the extent possible. It is the man behind the project who contributes substantially for the early and proper completion of a project.

(d) Safety should be given due importance at the planning, construction as well as serviceability stage.

Statement-II

The following bridges and flyover projects are pending clearance/execution/ completion in Delhi:—

1. Public Works Department, National Capital Territory of Delhi.

i) Flyover on Ring Road at Dhaula Kuan.

ii) Flyover on Ring Road at Safder-jung.

iii) Four lane additional bridge over Yamuna near ITO (Lok Nayak Sethu).

iv) Improvement Scheme at yamuna Bazar intersection-Hanuman Sethu Flyover.

v) Bridges over Hindon cut Canal and Gazipur Drain.

v) Flyover on Ring Road at Punjabi Bagh.

2. Delhi Tourism and Transportation Development Corporation.

i) Flyover on Ring Road at Raja Garden.

ii) Flyover on Ring Road at Ashram Chowk.

3. Delhi Municipal Corporation.

i) Rail under bridge on Rohtak Road near Kishan Ganj.

ii) Bridges over railway line connecting S.P. Mukherjee Marg with Azad market.

iii) Widening of Calcutta Bridge on S.P. Mukherjee Marg near Yamuna Bridge.

पूर्व संसद सदस्यों हेतु दिल्ली में आवास

***308. श्री रामदेव भंडारी:** क्या प्रधान मंत्री यह बताने की कृपा करेंगे किः

(क) क्या उन पूर्व संसद सदस्यों के लिए, जिनके पास दिल्ली में अपना घर नहीं है, शहर में स्थायी या